

# ABSTRACT OF THE DISCLOSURE

The efficient temperation of a sample is achieved when the sample is subjected to centrifugation simultaneously with heating and optionally also cooling. This is achieved in a device comprising at least a rotor (1) for holding reaction vessels (2), a motor (3), connected to the rotor, a processor (4) for controlling the speed of the rotor, and elements (5 and 6) for heating and cooling the contents of the reaction vessels, wherein the elements (6) for heating cover the apices of the reaction vessels for at least part of the rotational path of the vessels and that the elements for heating operate at a temperature significantly higher than the meeting temperature of the reaction vessels. The invention further relates to a method for performing chemical reactions and in particular a method for performing biochemical reactions involving thermocycling, for example PCR-reactions.